STATE OF MARYLAND

DHMH

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January 4, 2013

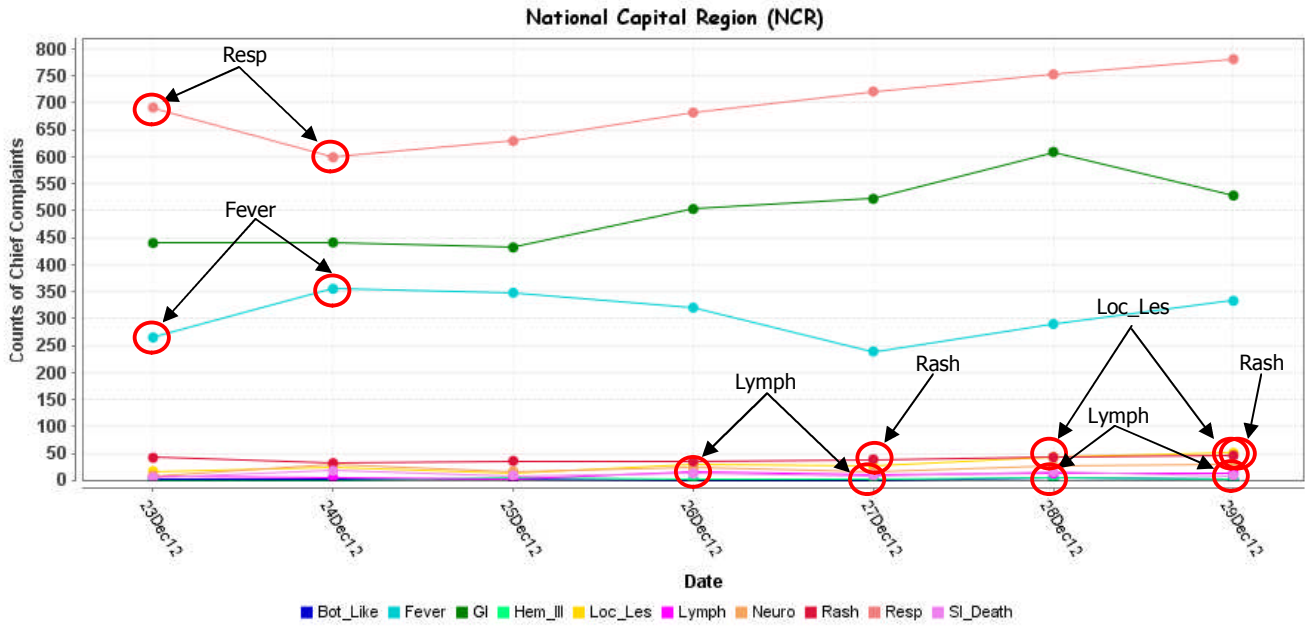
Public Health & Emergency Preparedness Bulletin: # 2012:52
Reporting for the week ending 12/29/12 (MMWR Week #52)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

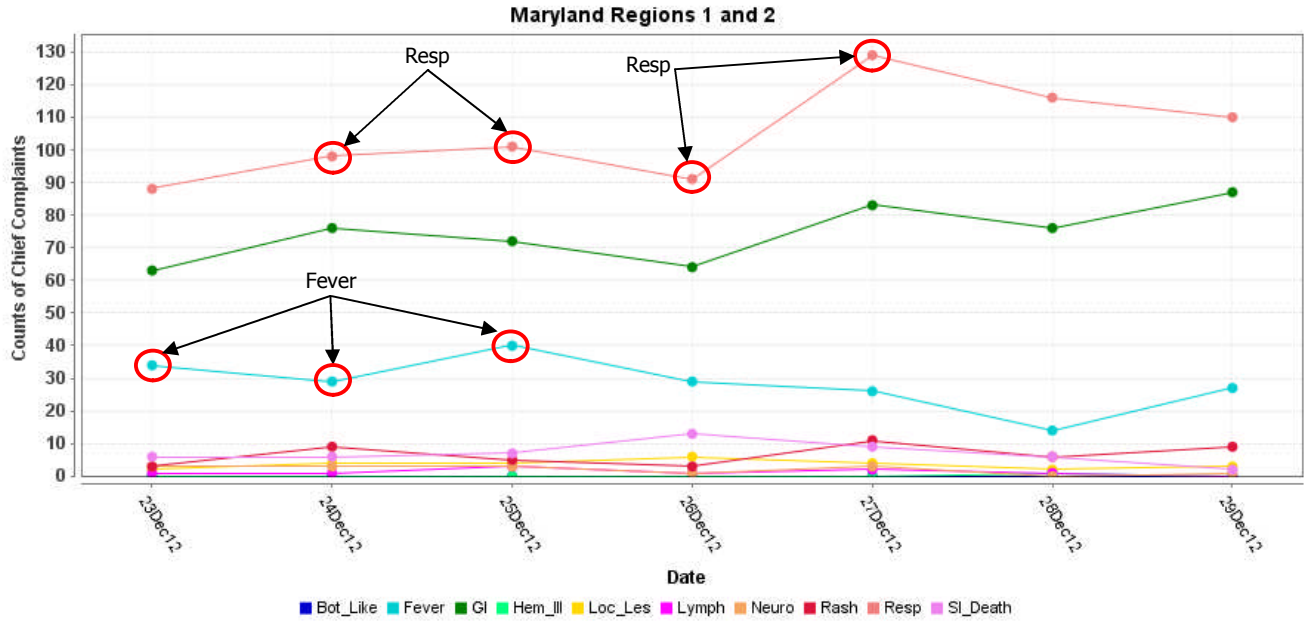
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

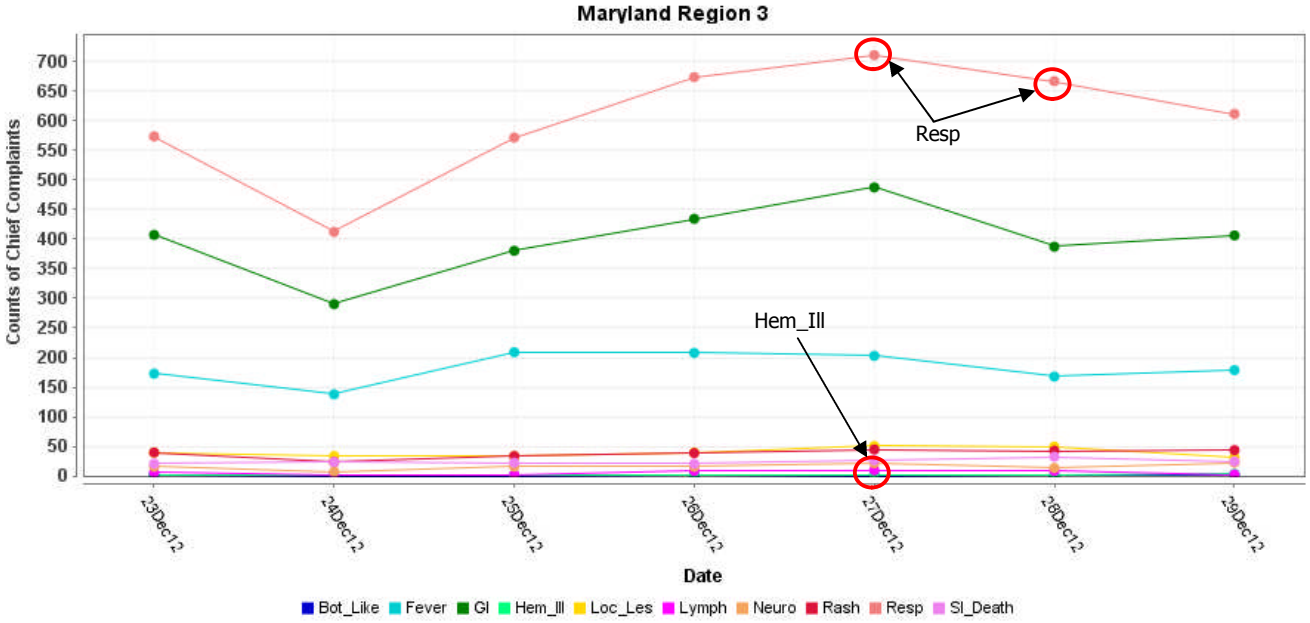


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

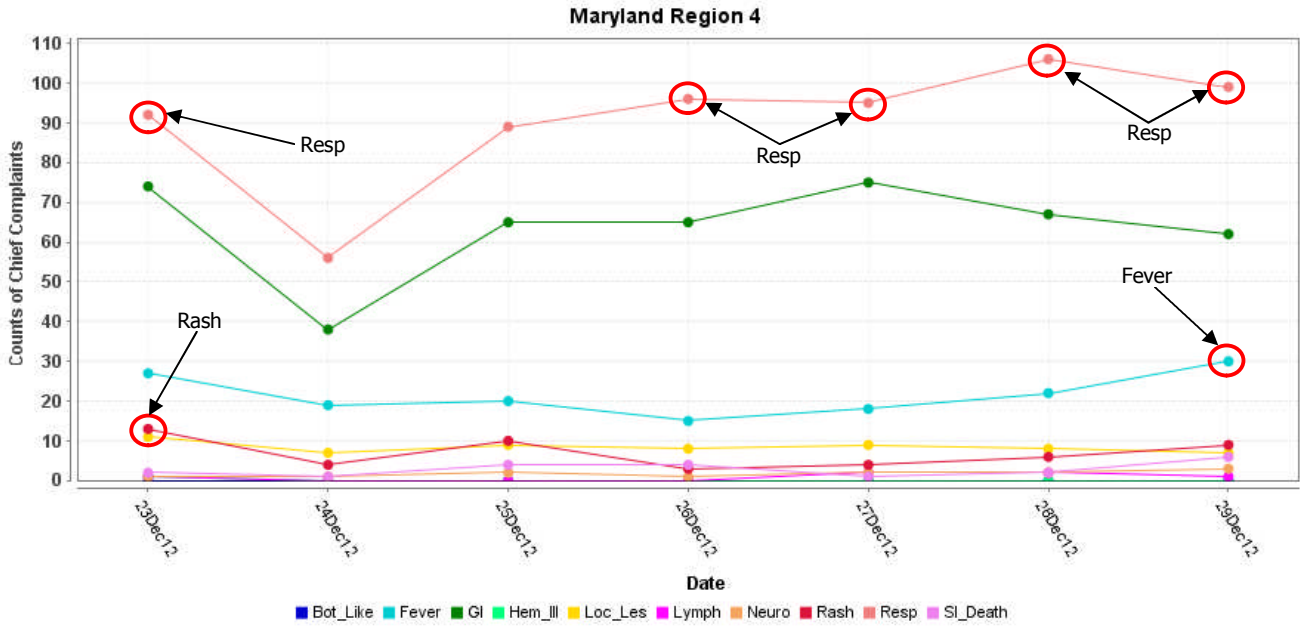
MARYLAND ESSENCE:



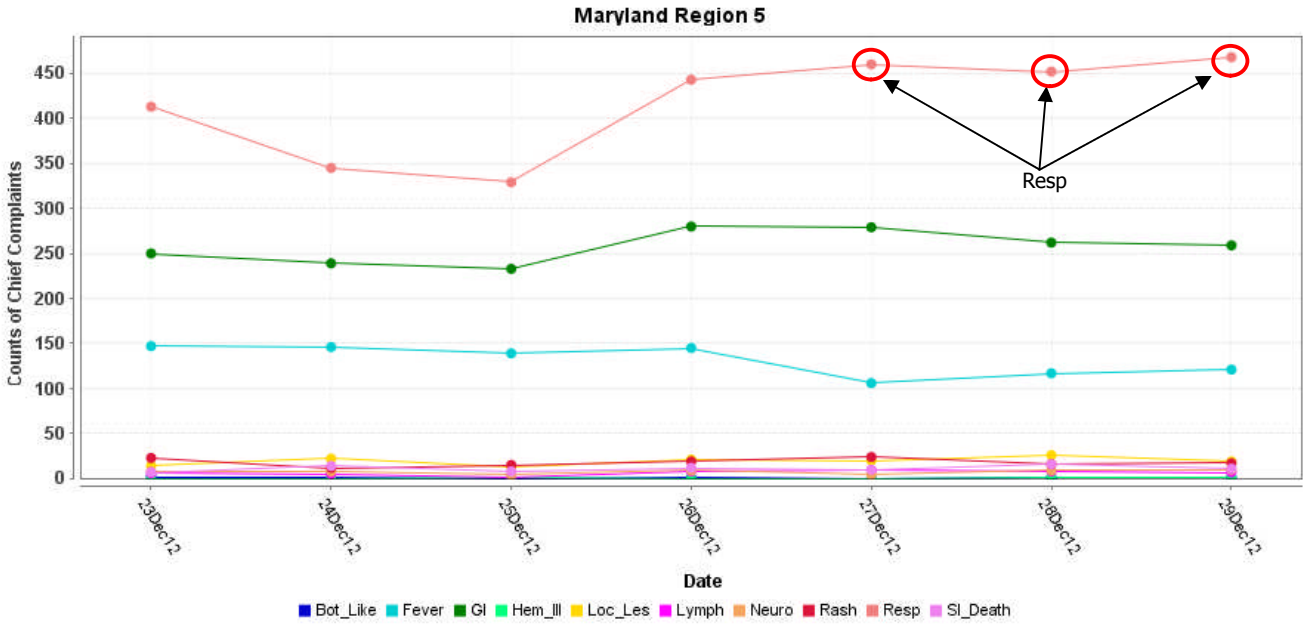
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



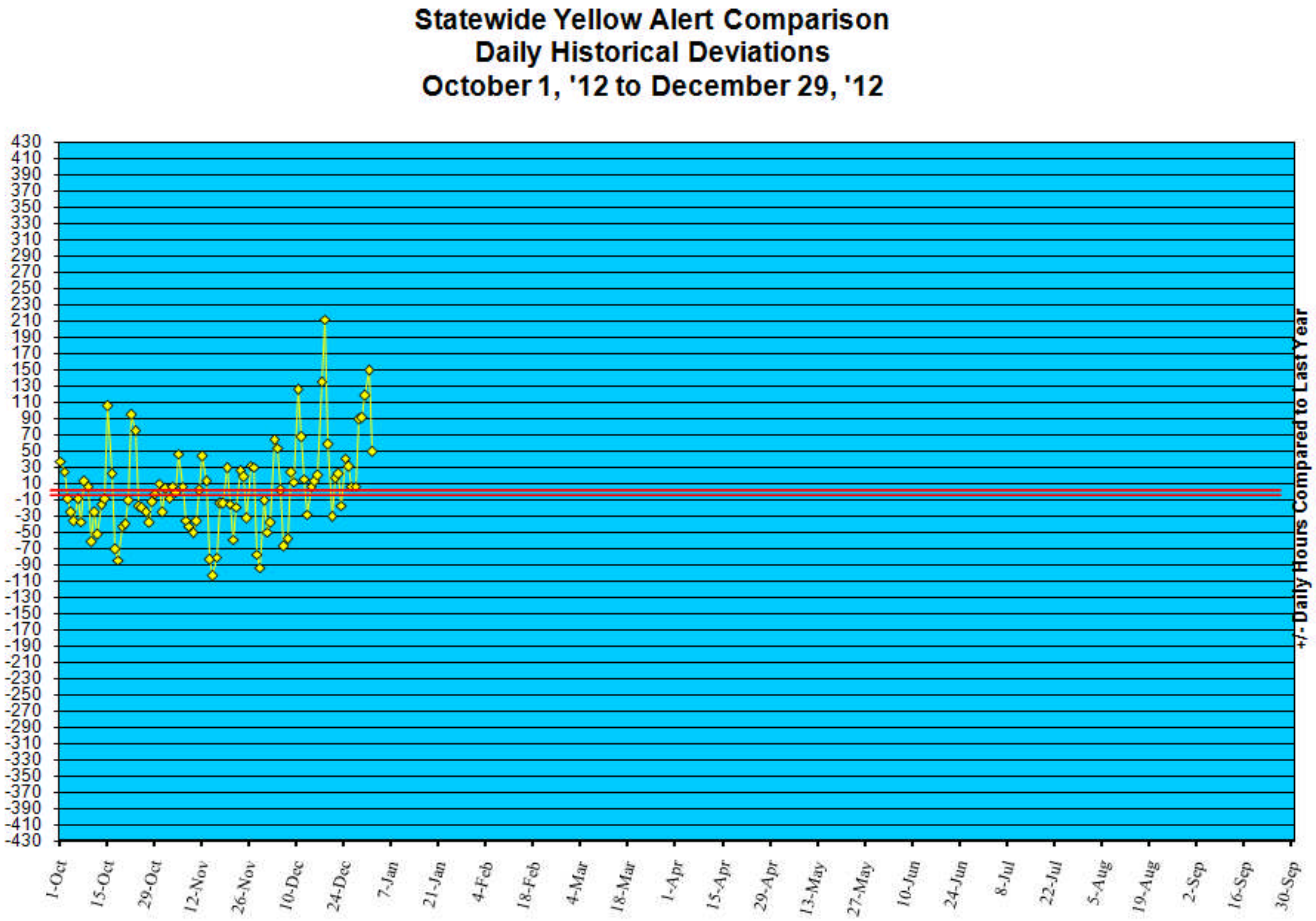
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in November 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (December 23 – December 29):	2	0
Prior week (December 16 – December 22, 2012):	5	0
Week#52, 2011 (December 25 – December 31, 2011):	6	0

11 outbreaks were reported to DHMH during MMWR Week 52 (December 23 - 29, 2012)

5 Gastroenteritis outbreaks
2 outbreaks of GASTROENTERITIS in Nursing Homes
3 outbreaks of GASTROENTERITIS in Assisted Living Facilities

1 Foodborne outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Restaurant

5 Respiratory illness outbreaks
2 outbreaks of INFLUENZA in Nursing Homes
3 outbreaks of INFLUENZA in an Assisted Living Facilities

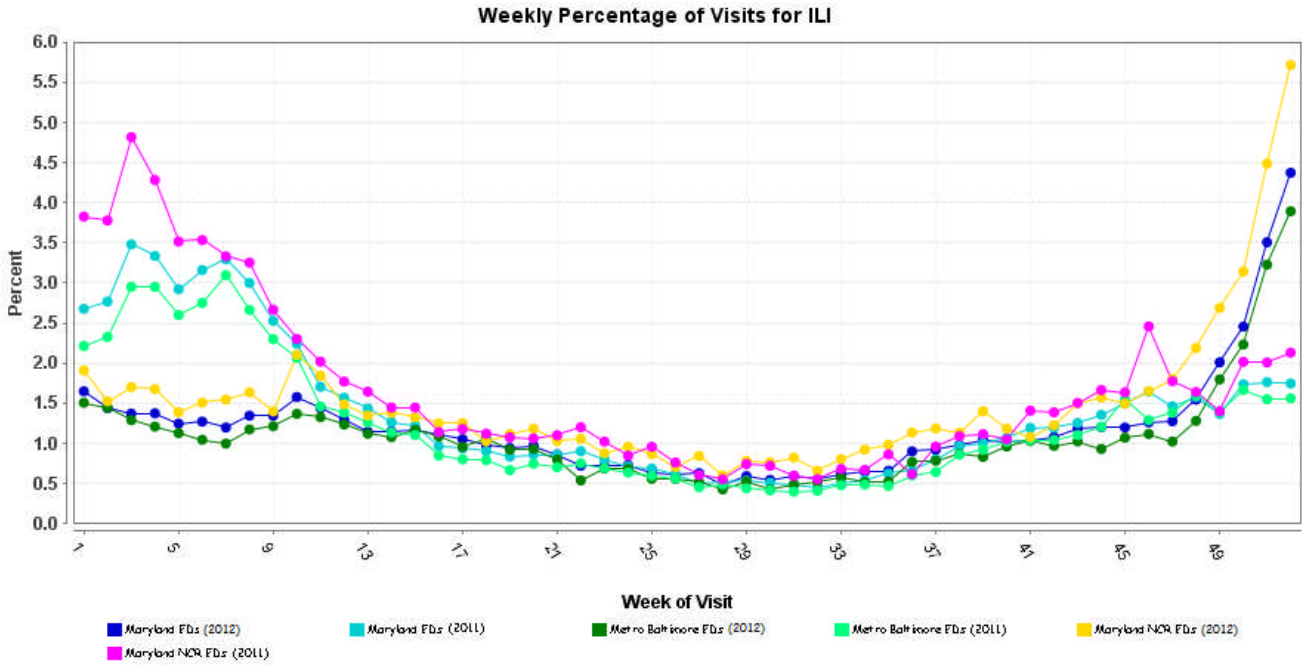
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 52 was: Widespread Activity with High Intensity.

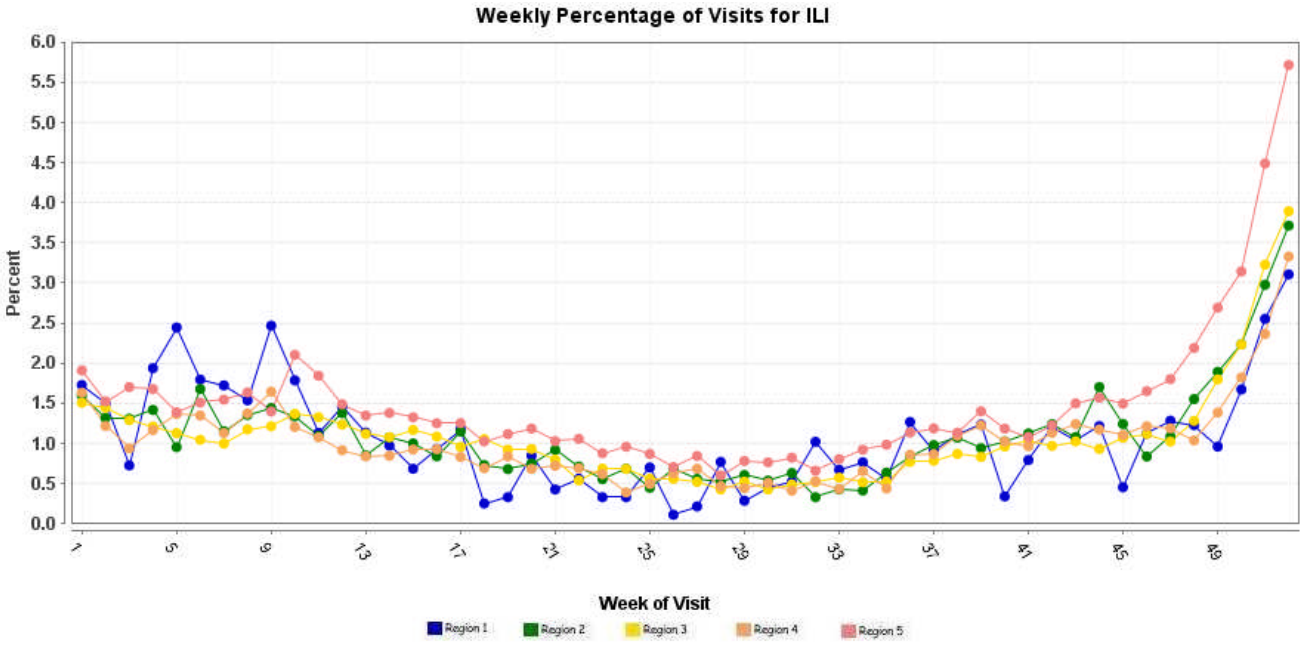
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



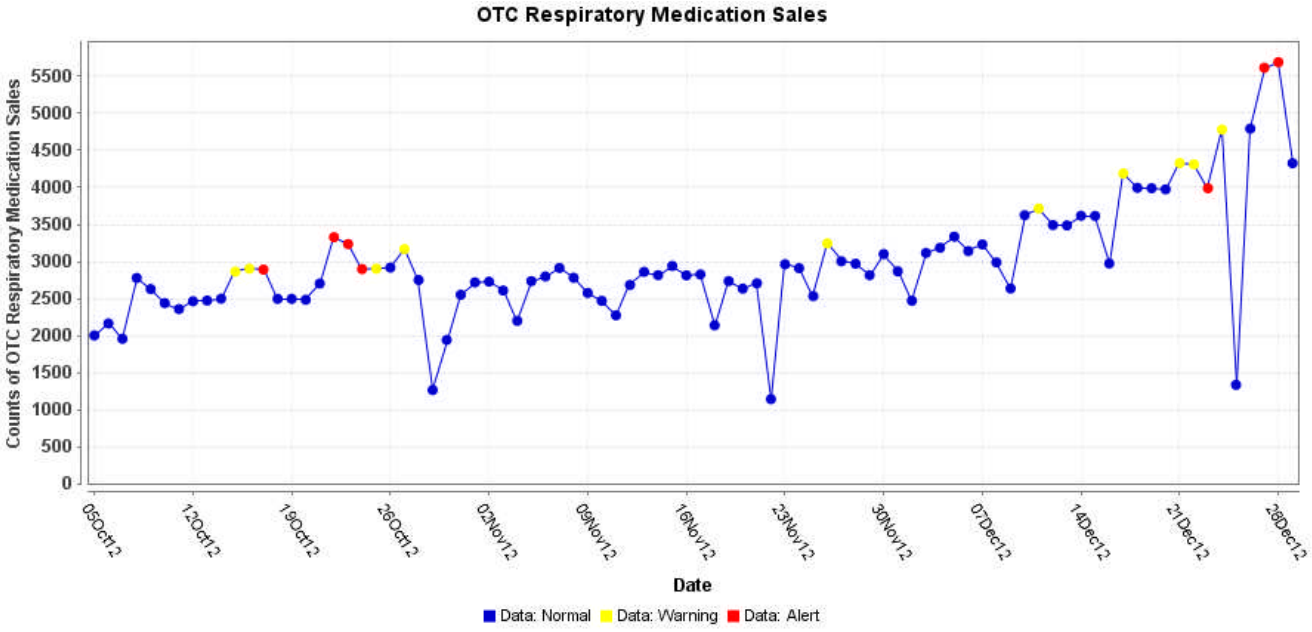
* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of December 17, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 610, of which 360 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (INDONESIA): 14 December 2012, The Ministry of Health, the Directorate General of Disease Control, and the Environmental Health [Service] announced that a new case of H5N1 [avian influenza] has been confirmed by the Center for Basic Biomedical and Health Technologies, Balitbangkes. The case is a 4-year-old male, a resident of Kampung Nagreg, Gorowong Village, District Parung Panjang, Bogor regency, West Java. The child exhibited symptoms of fever on 20 Nov 2012, and on 1 Dec 2012 the case was moved to Pustu. On 4 Dec 2012 there was no change in the condition of the case when seen by a private doctor. On the morning of 5 Dec 2012 the case went to a health centre and in the afternoon was referred to the Private RSIA for hospitalization. On 6 Dec 2012 the case was referred to the Tangerang District Hospital because of onset of fever, cough, and shortness of breath. The condition of the patient worsened and the child eventually died at 23:40hr. Epidemiological investigations have been conducted by the hospital and the other agencies involved including a possible risk factor of direct contact with poultry carcasses, including possible exposure to entog (ducks) in the neighborhood. With inclusion of this case, the cumulative number of bird flu cases in Indonesia since 2005 until this new report is 192 cases with 160 deaths. Director General of Disease Control and Environmental Health, Prof. Dr.Tjandra Yoga Aditama as the focal point of the International Health Regulations (IHR), has reported the case to the World Health Organisation (WHO). This information is released by Center for Public Communication, Secretariat General of the Ministry of Health.

NATIONAL DISEASE REPORTS*

BOTULISM (USA): 23 December 2012, S&M International Inc., Bayonne, NJ is recalling Yang Sheng cooked salted duck eggs, because they have the potential to be contaminated with *Clostridium botulinum*, a bacterium which can cause serious, life-threatening illness or death. Consumers are warned not to use the product even if it does not look smelled or spoiled. Botulism, a potentially fatal form of food poisoning, can cause the following symptoms: general weakness, dizziness, double-vision, and trouble with speaking or swallowing. Difficulty in breathing, weakness of other muscles, abdominal distention, and constipation may also be common symptoms. People experiencing these problems should seek medical attention. The recalled eggs were distributed between August to October 2012 to stores and markets located in the New York City area, Pennsylvania, Virginia, and Michigan. This product is vacuum packed in plastic with 6 eggs per 12.69 ounce package, UPC code 6949682803568. The lot code, YS12-02C, is printed on the product boxes. The recall was initiated after it was discovered through NYSDAM Sampling, which revealed the product was not processed in a manner to prevent growth of *Clostridium botulinum*. S&M International Inc. reached the decision to recall this product after a thorough investigation. The company has taken a number of corrective steps to address the issue. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

YELLOW FEVER (SUDAN): 29 December 2012, Experts claim that the outbreak of yellow fever currently affecting Sudan is the worst the world has experienced in the past 20 years. The disease has already claimed the lives of 168 people, while 800 suspected cases of the mosquito-spread disease have been reported across Darfur, since the outbreak began in October [2012]. Many more cases are likely not being reported to health authorities. The official death toll has currently surpassed that of a 2005 yellow fever outbreak in Sudan's South Kordofan region, which led to 163 deaths from 604 cases over a period of 5 months. Yellow fever is caused by a mosquito-borne virus endemic in tropical regions of Africa and South America. In its extreme form, it causes jaundice with liver and kidney failure as well as systemic bleeding. Yellow fever often reaches epidemic proportions and results in high death rates. The current outbreak in Sudan could be linked to heavy rains and flooding in the region, which facilitated mosquito breeding this year [2012]. Moreover, prior to the recent outbreak, Darfur's routine vaccination programs had never included vaccinations against the yellow fever virus, [lack of which] which could have facilitated its rapid and extensive spread. The disease's occurrence has followed nomadic migration routes across Darfur and has affected mainly rural areas, although there is a risk of it spreading to urban areas as well as the camps for internally displaced people, which house over 2 million people forced to flee their homes due to the conflict in Darfur. While a vaccine can prevent infection, there is no specific drug treatment for infected individuals. Darfur launched a national immunization campaign in November 2012 to cover 2.2 million people, which ended on 7 Dec [2012]. The 2nd phase this month was launched on 15 Dec [2012] and it aims to reach an additional 1.2 million people at risk. In organizing its national vaccination campaign, the Sudanese government has received the support of the international community, mainly through the World Health Organization (WHO). 1.3 million doses of yellow fever vaccine for the 2nd phase of the campaign were mobilized through the support of the Government of Sweden. On 18 Dec [2012], the UK announced that it would provide [USD] 2.9 million to support the vaccination of 2 million in Darfur. The yellow fever outbreak has affected 34 localities in Central, North, South, East abd West Darfur. In reporting the updated regional situation and the vaccination campaign's results thus far, West Darfur's health minister claims that yellow fever has ended in his state. In turn, Central Darfur's health officials explained that new cases had been registered, but that the patients all came from a gold mining area in Northern Darfur and that Central Darfur had not recorded any new locally-generated cases in over 2 weeks. The health minister of South Darfur announced the initiation of a 3rd phase of the vaccination campaign in the state, after the 2nd phase ended on 27 Dec [2012] and covered over 70 percent of the population. (Viral Hemorrhagic Fever is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

UNDIAGNOSED FOOD POISONING (RUSSIA): 27 December 2012, Visitors of one of the sushi bars in the city of Krasnodar are continuing to be admitted to the regional hospital for an "unknown intestinal infection." 17 people have been hospitalized thus far. The 1st of the poisoned visitors of the

restaurant of Japanese cuisine was admitted to the hospital with the typical symptoms of food poisoning. This incident did not appear to be an emergency. After a few hours, poisoned inhabitants of Krasnodar started to arrive in the hospital, one after the other, and their recollection of the history of the disease was surprisingly similar. They all ate in the "About Sushi" restaurant, all having acute intestinal infection and a temperature above 40 C. When the 3rd visitor of the restaurant arrived at the hospital, the physicians officially declared a mass poisoning. The activity of the restaurant, the visitors of which were in the hospital, was suspended pending clarification of the source of contamination, said the Deputy head of the administration of Rospotrebnadzor in the Krasnodar region, Yuri Ananich. "An administrative investigation was immediately initiated. In the meantime, the activities of the restaurant were suspended. The raw materials will be examined. The staff will also be investigated, and that has already begun. A bacteriological investigation will be carried out within 5 days." According to official data, the Krasnodar regional hospital for infectious diseases now has 17 patients related to this situation. A few patients with different data from which the hospital did not suspect poisoning have been discharged. These patients were initially suspected of having just an intestinal infection, which has not been confirmed. Several restaurants, operating under the trademark "About Sushi," in Krasnodar were closed until determination of the responsible party, chef, or suppliers. The 17 hospitalized patients from the Japanese cuisine restaurant are reported as having a condition of moderate severity. However, given the diagnosis of an "unknown intestinal infection," according to the prognosis by the doctors, with the patients receiving the best care and treatment, recovery is still estimated to take about 2 weeks. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

FOOD POISONING (COMOROS): 27 December 2012, Several cases of turtle meat food poisoning were reported in Ndrondroni in the south of Comoros since last Saturday [22 Dec 2012]. The local authorities announced 3 deaths and over 30 hospitalizations. The turtle meat began to cause serious problems on Sat 22 Dec 2012. These cases of food poisoning are due to the consumption of turtle meat, which is very popular in Mwali. According to a source related by the newspaper Al Watwan, the cause of the food poisoning was a male turtle that "is not edible." For many years, the Comorian authorities have declared a ban on the consumption of turtle meat and eggs. Three deaths were reported following consumption of this prohibited meat. The 1st victim was an unborn child. The mother ate some turtle meat and was hospitalized. Al Watwan reports that "the doctors did all they could to deliver the baby and save the mother after they realized the baby could not be saved. Two boys also died after they ate turtle meat." Over 30 people suffered acute stomach pain, and also vomiting for some of them, and were admitted to a healthcare center in the district of Nyumashiwa and to the hospital on the island of Fomboni, where they received intensive care. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX (ENGLAND): 24 December 2012, A 42-year-old woman from Rochester who injected herself with heroin contaminated with anthrax died in London at the King's College hospital. This is the 3rd death which has been recorded in the UK during an outbreak of anthrax among drug addicts. According to experts, the anthrax was caused by infected heroin. The Health Protection Agency says that since June 2012, several European countries have reported 13 cases of anthrax among intravenous drug users. A total of 6 occurred in the UK (4 in England, 1 in Scotland, and 1 in Wales). And earlier in the year, 2 drug addicts died in Blackpool[England]due to the bacterial infection. In order to become infected with anthrax, it is enough to breathe or swallow its spores. Physicians do not exclude the rapid appearance of new victims. Moreover, anthrax threatens not only those who inject the drug intravenously. Dr. Fortune Ncube notes: "Anthrax is treatable with antibiotics, if therapy is started early. Therefore, physicians should be immediately alert when drug addicts report suspicious symptoms like infections of soft tissues or blood poisoning." (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable